lchm2150

2023

UCLouvain

Physical chemistry and physicochemical calculations II

6.00 credits

45.0 h + 10.0 h

Q1

| Teacher(s) | Leyssens Tom ; | | | |
|-----------------------------|---|--|--|--|
| Language : | English > French-friendly | | | |
| Place of the course | Louvain-la-Neuve | | | |
| Main themes | A detailed study of the properties of matter and molecules is presented and completed by a discussion of chemical reactivity models. Teachers will place emphasis on microscopic versus macroscopic properties connecting both approaches through a statistical point of view. | | | |
| Learning outcomes | At the end of this learning unit, the student is able to : The course aims to guide students in completing their knowledge in physical chemistry and to apply it to concrete cases. A systematic presentation completes the education of chemical thermodynamics and kinetics acquired during the bachelor's degree. | | | |
| Evaluation methods | A written exam takes place in January. During the exam, the student is able to reproduce the theory that is considered during the course, as well as to apply the course material to solve practical problems. The exam will cover all the chapters that are treated in the course. A similar type of evaluation is organized in september | | | |
| Teaching methods | This course is a 5 Credit course and is podcast based. Classes take place in person, or through pre-registred courses. For these latter students are required to visualize and work the material themselves. Question-Discussion sessions are organized on a regular basis to discuss. | | | |
| Content | The class focuses on crystal engineering, crystal growth and crystallization, more specifically looking at the concepts of polymorphism, chiral resolution and salt/co-crystallization using physico-chemical principles applied to crystallization. | | | |
| Inline resources | slides available on moodle | | | |
| Faculty or entity in charge | СНІМ | | | |

| Programmes containing this learning unit (UE) | | | | | |
|---|---------|---------|--------------|-------------------|--|
| Program title | Acronym | Credits | Prerequisite | Learning outcomes | |
| Master [120] in Chemistry | CHIM2M | 6 | | ٩ | |
| Master [60] in Chemistry | CHIM2M1 | 6 | | ٩ | |